

Cash or Accrual Income – Does It Really Make a Difference?

by Dr. Paul Ellinger

The Farm Financial Standards Council's (www.ffsc.org) position that income should be reported on an accrual basis is widely accepted. However, many farm and ranch accounting systems provide detailed cash accounting tax records, and borrowers often don't maintain the information needed to produce accrual adjusted profitability statements.

Problems of Timing

On a cash basis, revenue and expenses are composed of the cash actually received or paid irrespective of when the goods are produced or expenses incurred. On an accrual basis, revenue represents the value of items produced during a given period and expenses represent the costs incurred by the business. Timing of the cash sales or cash expenses will not directly affect an accrual income statement. There is little dispute that an accrual statement will provide a more accurate measure of a borrower's historic or projected profitability.

Balance sheets that coincide with the start and end of the accounting period for which income is measured are needed for accrual adjustments. Accounting firms and farm business record associations like Illinois Farm Business Farm Management Association (FBFM) help farmers keep accrual records. In many situations, information to make accrual adjustments is unavailable.

Lenders often use cash income statements or tax returns as proxies for farm and ranch profitability. Two sets of potential problems can occur with the use of tax returns. The first set relates to specific tax issues. For example, issues related to the reporting of CCC transactions, elections on

insurance proceeds or the reporting of purchase costs of livestock can result in differences between accrual income and tax profit.

Percentage Differences Between Cash and Accrual Measures of Net Farm Income for 1,084 Farms. 1995-97.

	1995	1996	1997	Three-Year Average
Percentage Difference Between Cash and Accrual Income				
Upper quartile	67%	66%	68%	44%
Median	34%	40%	33%	24%
Lower quartile	11%	19%	11%	10%
Percentage Difference Between Cash Income Adjusted for Inventory Changes vs. Accrual Income				
Upper quartile	38%	24%	32%	15%
Median	16%	9%	13%	7%
Lower quartile	5%	3%	3%	3%

Source: *Illinois Farm Business Farm Management System and the Department of Agricultural and Consumer Economics at University of Illinois, Urbana-Champaign.*

Measuring Profitability

The absolute percentage differences between cash and accrual measures of income for a sample of farms in the FBFM record keeping system are reported in the table. The median values represent the levels that one-half of the farms exceed. The upper quartile is the value exceeded by one-fourth of the farms in each year. Over the three years measured, the median discrepancy is between 33 and 40 percent.

A common argument for using cash income information for lending purposes is that discrepancies average out over time. But the median discrepancy between the three-year average cash income level and the three-year average age accrual income level is still 24 percent. Furthermore, one-fourth of the farms have a 44 percent difference between the average measures. Clearly, there are many situations in which cash income does not provide a good measure for profitability.

The bottom panel of the table shows the percentage differences between a modified cash income measure and an accrual profitability measure. The cash measure is modified to reflect the accrual adjustments for changes in grain and livestock inventories. The discrepancies between the measures are reduced substantially. But a substantial number of farms still have discrepancies greater than 20 percent. On average, accounting for inventory changes improves the ability of the cash measure to proxy profitability, but a large number of situations still result in large discrepancies.

Encourage borrowers to develop accounting records that use accrual based information. One strategy might be to educate them on one or two accrual adjustments per year.

Furthermore, as you develop and analyze cash flow projections, take account of the potential effects on profitability in addition to cash flows. Lending decisions are often complex.

Paul Ellinger is an associate professor at the University of Illinois. He can be reached at 217/333-5503 pellinge@uiuc.edu

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Subscription inquiries: 314-569-2700 AgLender@doane.com